Appendix A

Standard Project Commitments

APPENDIX A – STANDARD PROJECT COMMITMENTS

The following Standard Project Commitments (SPCs) are part of the proposed action. Table 1 lists the SPCs that Palmdale Water District (PWD), and its contractors, will implement during all activities associated with the proposed action.

Table 1.	Table 1. Littlerock Sediment Removal Project SPCs		
ID	Standard Project Commitment	Issue Areas Affected	
AQ-1	Limit Engine Idling. Vehicle engine idling shall be limited to the extent feasible, and shall be limited to a maximum duration of 3 minutes per event.	Air Quality, Recreation and Land Use	
	Fugitive Dust Controls. Fugitive dust controls shall conform with applicable AVAQMD Rule 403 (c) requirements for all phases of the project; a Dust Control Plan (DCP) will be submitted to the APCO for approval if more than 5 acres would be disturbed or if more than 2,500 cubic yards of material will be excavated per day for at least three days (for each phase of the project as applicable); and in addition to the Rule 403 (c) requirements or to specify requirements where that rule provides options, the following specific additional fugitive dust control measures will be used during the main excavation phase of the project: Install wheel washers or wash the wheels of trucks and other heavy equipment where vehicles exit unpaved roadways on the site and the sediment disposal area.		
	 Street sweeping shall be conducted to cleanup any carryout from unpaved areas and reduce paved road silt content. 		
	 Water the disturbed areas of the active construction sites and active unpaved roadways used during construction at least four times per day and more often if uncontrolled fugitive dust is noted. 	Air Quality,	
AQ-2	 Cover all trucks hauling sediment and other loose material, or require at least two feet of freeboard. 	Biology, Recreation and Land Use	
	 Travel routes shall be developed to minimize both unpaved road travel. Sediment excavation will be conducted in areas of the reservoir bed that are near the maintained reservoir water level so that the sediment excavated is naturally wet or excavation will occur in areas that are watered prior to excavation. 		
	 Sediment storage areas will have non-toxic dust suppressants sprayed over their active surface area at the end of each year's excavation period. 		
	 Establish a vegetative ground cover (in compliance with biological resources impact Mitigation Measures) or otherwise create stabilized surfaces on all unpaved areas disturbed by the project, not including areas located within the maximum pool elevation of the Littlerock Reservoir, within 21 days after active construction operations have ceased each year. 		
	The reservoir level will be allowed to rise as fast as nature allows to levels above each year's annual excavation areas.		
AQ-3	Off-Road Engine Specifications. All off-road construction diesel engines not registered under CARB's Statewide Portable Equipment Registration Program, which have a rating of 50 horsepower or more, shall meet, at a minimum, the Tier 3 California Emission Standards for Off-Road Compression-Ignition Engines as specified in California Code of Regulations, Title 13, section 2423(b)(1) unless that such engine is not available for a particular item of equipment. In the event a Tier 3, or higher tier, engine is not available for any off-road engine larger than 50 horsepower, that engine shall be equipped with a Tier 2 engine equipped with a catalyzed diesel particulate filter (soot filter), unless certified by engine manufacturers that the use of such devices is not practical for specific engine types. Equipment properly registered under and in compliance with CARB's Statewide Portable Equipment Registration Program are in compliance with this project commitment.	Air Quality, Recreation and Land Use	

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ID	Standard Project Commitment	Issue Areas Affected
AQ-4	On-Road Engine Specifications. All on-road construction vehicles shall meet all applicable California on-road emission standards. This does not apply to construction worker personal vehicles.	Air Quality, Recreation and Land Use
AQ-5	Reduce Off-Road Vehicle Speeds. Vehicle speeds shall remain below 15 mph off-pavement to minimize dust and reduce wildlife impacts.	Air Quality, Biology, Recreation and Land Use
BIO-1a	Provide Restoration/Compensation for Impacts to Native Vegetation Communities . Refer to the discussion following Table 1 for the full text of this SPC.	Biology, Wildfire Prevention
BIO-1b	Worker Environmental Awareness Program (WEAP) that will be implemented for construction crews by a qualified biologist(s). Training materials and briefings shall include but not be limited to: discussion of the Federal and State Endangered Species Acts, Bald and Golden Eagle Protection Act, and the Migratory Bird Treaty Act; the consequences of non-compliance with these acts; identification and values of plant and wildlife species and significant natural plant community habitats; fire protection measures; sensitivities of working on NFS lands and identification of T&E and Forest Service sensitive species; hazardous substance spill prevention and containment measures; a contact person in the event of the discovery of dead or injured wildlife; and review of mitigation requirements. The WEAP shall include the protocol to be followed when road kill is encountered in the work area or along access roads to minimize potential for additional mortality of scavengers, including listed species such as the California condor. On NFS lands, road kill shall be reported to the Forest Service or other applicable agency within 24 hours. On non-NFS lands, road kill shall be reported to the appropriate local animal control agency within 24 hours. Training materials and a course outline shall be provided to Forest Service for review and approval at least 30 days prior to the start of construction. Maps showing the location of special-status wildlife, fish, or populations of rare plants, exclusion areas, or other construction limitations (i.e., limited operating periods and arroyo toad exclusion areas) will be provided to the environmental monitors and construction personnel who have completed training prior to the start of construction, and this list shall be updated by PWD as required when new personnel start work. No construction worker may work in the field for more than 5 days without participating in the WEAP.	Biology
BIO-2	Prepare and Implement a Weed Control Plan. The PWD shall prepare and implement a Weed Control Plan, which shall be part of the Habitat Restoration and Revegetation Plan. The Weed Control Plan, including the control methods to be used, shall be prepared consistent with the FS's Plan for Invasive Plants, Angeles National Forest and San Gabriel Mountains National Monument Environmental Assessment. The Weed Control Plan will be implemented during construction of the grade control structure, sediment removal, and operation and maintenance. The Weed Control Plan shall be submitted to the Forest Service for approval of the weed control methods, practices, and timing. The Weed Control Plan shall include the following: a. A pre-construction weed inventory shall be conducted for all areas subject to ground-disturbing activity. Weed populations that: (1) are rated High or Moderate for negative ecological impact in the California Invasive Plant Inventory Database (Cal-IPC, 2006); and (2) aid and promote the spread of wildfires (such as cheatgrass, Saharan mustard, and medusa head); and (3) are considered by the FS as species of priority (for NFS lands only) shall be mapped and described according to density and area covered. In areas subject to ground disturbance, weed infestations shall be treated prior to sediment removal activities according to control methods and practices for invasive weed populations designed in consultation with the Forest Service. The Weed Control Plan shall be updated and utilized for eradication and monitoring for annual sediment removal activities. b. Weed control treatments shall include all legally permitted herbicide, manual, and mechanical methods applied with the authorization of the Forest Service, and Fish and Wildlife Service where appropriate. The application of herbicides shall be in compliance with all state and federal laws and regulations under the prescription of a Pest Control Advisor (PCA), where concurrence has been provided by the Forest Service, and implemented by a Licensed	Biology, Wildfire Prevention

Table 1. I	able 1. Littlerock Sediment Removal Project SPCs	
ID	Standard Project Commitment	Issue Areas Affected
	more than 30% anticipated rain event. In riparian areas only water-safe herbicides shall be used. Herbicides shall not be applied according to the prescriptions in the manufacturer label. Where manual and/or mechanical methods are used, disposal of the plant debris will follow the regulations set by the Forest Service. The timing of the weed control treatment shall be determined for each plant species in consultation with the Forest Service (on NFS lands).	
	c. Surveying and monitoring for weed infestations shall occur annually for years one to five post construction of the grade structure and bi-annually thereafter. For the life of the Project (on NFS lands) the PWD will survey for new invasive weed populations every two years. Treatment of identified weed populations shall occur at a minimum of once annually should they occur in the disturbance area. When no new seedlings or resprouts are observed at treated sites for three consecutive, normal rainfall years, the weed population can be considered eradicated and weed control efforts may cease for that impact site.	
	d. All seeds and straw materials shall be weed-free rice straw, and all gravel and fill material, if used, shall be certified weed free. Gravel and fill must be from a quarry approved by a Forest Service botanist. All plant materials used during restoration shall be native, certified weed-free, and approved by the Forest Service. All erosion control material must be biodegradable. Wattles wrapped in "photodegradable" plastic will not be acceptable.	
	e. Prior to work on NFS lands, all vehicles traveling off road and all ground disturbing equipment shall be washed (including wheels, undercarriages, fuel pans, skid plates and bumpers) before entering Forest Service lands. On non-federal lands vehicles and equipment shall be washed prior to commencing work in off road areas. Vehicles shall be cleaned at existing construction yards or legally operating car washes. In addition, tools such as chainsaws, hand clippers, pruners, etc. shall be washed before entering all Project work areas. PWD shall notify NFS at least 2 working days prior to moving each piece of equipment on to NFS land, unless otherwise agreed. Notification will include a Certificate of Cleaning Equipment. Upon request of NFS, arrangements will be made for NFS to inspect each piece of equipment prior to it being placed in service. This requirement for notification does not apply to handheld equipment and tools. All washing on NFS lands shall take place where rinse water is collected and disposed of in either a sanitary sewer or landfill, unless otherwise approved by the Forest Service. A Certificate of Cleaning Equipment log shall be kept for all vehicle/equipment/tool washing that states the date, time, location, type of equipment washed, methods used, and staff present. The log shall include the signature of a responsible staff member. Logs shall be available to the Forest Service for inspection at any time and shall be submitted to the Forest Service on a monthly basis.	
BIO-4	Conduct Pre-Construction Surveys and Monitoring for Breeding Birds. The PWD shall conduct pre-construction surveys for nesting birds prior to any vegetation removal, staging of equipment, sediment removal activities, or other ground disturbance that will occur during the breeding period (from January 15 through August 31 for raptors and humming birds and March 15 through September 1 for other birds). This action will be required for all activities including annual sediment removal. The biologists conducting the surveys shall be Forest Service approved experienced bird surveyors familiar with standard nest-locating techniques. Surveys shall be conducted in all areas within a 500-foot buffer of any area proposed for Project disturbance and no more than 3 days prior to the initiation of any vegetation removal, staging of equipment, sediment removal activities, or other ground-disturbance activities. If breeding birds with active nests are identified, a 300-foot buffer shall be established around the nest site and no construction activities shall be allowed within the buffer until the young have fledged from the nest or the nest fails. The 300-foot buffer may be adjusted after review by a qualified ornithologist based on existing conditions, including ambient noise, topography, and disturbance with concurrence from the Forest Service, as appropriate. A Forest Service approved biological monitor shall be responsible for recording the results of pre-construction surveys and copies of all monitoring reports shall be submitted to the Forest Service at the end of each breeding season.	Biology

Table 1. I	Table 1. Littlerock Sediment Removal Project SPCs		
ID	Standard Project Commitment	Issue Areas Affected	
BIO-5	Conduct Preconstruction Surveys for State and Federally Threatened, Endangered, Proposed, Petitioned, Candidate, and Forest Service Sensitive Plants and Avoid Any Located Occurrences of Listed Plants. The PWD shall conduct focused surveys for federal and state-listed and other special-status plants. All special-status plant species (including listed threatened or endangered species, Forest Service Sensitive, and all CRPR 1A, 1B, 2, 3, and 4 ranked species) subject to project disturbance shall be documented by the pre-construction survey report. Surveys shall be conducted during the appropriate season in all suitable habitat located within the Project disturbance areas and access roads and within 100 feet of disturbance areas and access roads. Surveys shall be conducted by a qualified botanist approved by the Forest Service. The field surveys and reporting must conform to current CDFW botanical field survey protocol (CDFG, 2009) or more recent updates, if available. The reports will describe any conditions that may have prevented target species from being located or identified, even if they are present as dormant seed or below-ground rootstock (e.g., poor rainfall, recent grazing, or wildfire). Prior to any vegetation removal, the PWD shall submit preconstruction field survey reports along with maps showing locations of survey areas and special-status plants to the Forest Service for review and approval. If federally or State-listed plants are detected in disturbance areas or within 100-feet of the disturbance areas, the PWD would avoid these populations and notify the Forest Service, USFWS, and CDFW as appropriate. The PWD shall avoid impacts to any State or federally listed plants. If Project activities result in the loss of more than 10 percent of the known individuals within the Forest Service Sensitive, and/or special-status plant species (List 1.B and List 2 only) occurrence to be impacted, the PWD shall preserve existing off-site occupied habitat that is not already part of the public lands in perpetuit	Biology	
BIO-6a	Conduct Surveys and Implement Avoidance Measures. Prior to any project activities at Rocky Point (the proposed grade control location) PWD shall have a FS approved biologist conduct clearance surveys for arroyo toads and implement protective measures to reduce the potential for arroyo toads to be present in the work area. After ensuring egg masses or any other life stage of arroyo toads is not present PWD will place exclusion fencing around the grade control structure work area. This will require placing fencing and a screened culvert in the channel to prevent animals from moving into the work area.	Biology	
BIO-6b	Conduct Clearance Surveys and Construction Monitoring. After the placement of exclusion fencing PWD will have a FS approved biologist conduct five nights of clearance surveys during suitable weather conditions to relocate toads from the work area. Prior to the onset of construction activities, PWD shall provide all personnel who will be present on work areas within or adjacent to arroyo toad habitat with the following information: (a) a detailed description of the arroyo toad including color photographs; (b) the protection the arroyo toad receives under the Endangered Species Act and possible legal action that may be incurred for violation of the Act; (c) the protective measures being implemented to conserve the arroyo toad and other species during construction activities associated with the Project; and (d) a point of contact if arroyo toads are observed. For all areas in which this species has been documented PWD shall develop and implement a monitoring plan that includes the following measures in consultation with the USFWS and Forest Service. A. PWD shall retain a qualified biologist with demonstrated expertise with arroyo toads to monitor all construction activities in occupied arroyo toad habitat and within 300-feet of Rocky Point. The resumes of the proposed biologists will be provided to the Forest Service for concurrence. This biologist will be referred to as the authorized biologist hereafter. The authorized biologist will be present during all activities immediately adjacent to or within	Biology	

Table 1. I	ittlerock Sediment Removal Project SPCs	
ID	Standard Project Commitment	Issue Areas Affected
	habitat that supports populations of arroyo toad.	
	B. All trash that may attract predators of the arroyo toad will be removed from work sites or completely secured at the end of each work day. Prior to the onset of any construction activities, PWD shall meet on-site with staff from the Forest Service and the authorized biologist. PWD shall provide information on the general location of construction activities within arroyo toad habitat and the actions taken to reduce impacts to this species.	
	C. Any arroyo toads found during clearance surveys or otherwise removed from work areas will be placed in nearby suitable, undisturbed habitat (i.e., above Rocky Point at a pre-selected location in consultation with the USFWS and Forest Service. The authorized biologist will determine the best location for their release, based on the condition of the vegetation, soil, and other habitat features and the proximity to human activities. Clearance surveys shall occur on a daily basis in the work area.	
	 D. The authorized biologist will have the authority to stop all activities until appropriate corrective measures have been completed. 	
	E. To ensure that diseases are not conveyed between work sites by the authorized biologist or his or her assistants, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force will be followed at all times.	
	F. PWD shall restrict work to daylight hours, except during the placement of soil cement, or unless otherwise authorized by the Forest Service in order to avoid nighttime activities when arroyo toads may be present on the access roads. Traffic speed shall be maintained at 15 mph or less in the work area.	
	G.A qualified biologist must permanently remove, from within the Project area, any individuals of exotic species, such as bullfrogs, crayfish, and centrarchid fishes, to the maximum extent possible and ensure that activities are in compliance with the California Fish and Game Code.	
	H. No stockpiles of materials will occur in areas occupied by arroyo toads.	
	 Any spills of any fluids that may be hazardous to aquatic fauna (gasoline, hydraulic fluid, motor oil, etc.) in areas that may contain arroyo toads will be reported to the Forest Service and USFWS within four hours. 	
BIO-6c	Seasonal Surveys During Water Deliveries. PWD shall conduct annual surveys along the upper limit of the Reservoir during the months of March to June if water deliveries would result in a two-inch or greater reduction in water surface elevations in these areas. The authorized biologist would inspect the margin of the reservoir for egg masses or any other life stage of arroyo toads. At the completion of the survey the authorized biologist will prepare a letter report to document the conditions along the upstream margin of the Reservoir. If more than one egg string is present and the authorized biologist determines the reduction of water surface elevations may result in the loss of the egg string PWD will contact the USFWS and Forest Service prior to continued water deliveries.	Biology
BIO-7	Monitor Construction and Remove Trash and Microtrash. PWD shall retain a qualified biologist with demonstrated knowledge of California condor to monitor all construction and sediment removal activities within the ANF. The resumes of the proposed biologist(s) will be provided to the Forest service for concurrence. This biologist(s) will be referred to as the authorized biologist hereafter. If a condor is observed in the Project area the authorized biologist will have the authority to stop all activities within 500 feet of the condor until it leaves the area. All condor sightings in the Project area will be reported to the CDFW, USFWS and Forest. Should condors be found roosting within 0.5 miles of the sediment removal or construction area, no construction activity shall occur between 1 hour before sunset to 1 hour after sunrise, or until the condors leave the area. Should condors be found nesting within 1.5 miles of the construction area, no construction activity will occur until further authorization occurs from the CDFW, USFWS and Forest Service on NFS lands. Microtrash. Workers will be trained on the issue of microtrash – what it is, its potential effects to California condors, and how to avoid the deposition of microtrash. In addition, daily sweeps of the work area will occur to collect and remove trash in locations with the potential for California condors to occur. Worker Education. PWD will train all workers on the project concerning the California condor.	Biology

ID	Standard Project Commitment	Issue Areas
	Information will include: species description with photos and/or drawings indicating how to identify the California condor and how to distinguish condors from turkey vultures and golden eagles; protective status and penalties for violation of the ESA; avoidance measures being implemented on the Project; and contact information for communicating condor sightings. Reporting. All California condor sightings in the Project area will be reported directly to the CDFW, USFWS, and Forest Service.	Affected
BIO-8	Conduct Protocol Surveys for Least Bell's Vireo and Avoid Occupied Habitat. If construction or sediment removal activities are scheduled to occur during the breeding season (March 15 through September 15) PWD shall have a qualified ornithologist conduct protocol surveys in suitable habitat within 500 feet of disturbance areas including Cheseboro Road below the dam. In known occupied habitat for listed riparian birds, PWD shall conduct focused surveys of the Project and adjacent areas within 500 feet. The surveys shall be of adequate duration to verify potential nest sites if work is scheduled to occur during the breeding season. If a territory or nest is confirmed in a previously unoccupied area, the CDFW, USFWS and Forest Service shall be notified within 48 hours. In coordination with the CDFW, USFWS, and Forest Service a 300-foot disturbance-free buffer shall be established and demarcated by fencing or flagging. This buffer may be adjusted as determined by a qualified biologist in coordination with the CDFW, USFWS and Forest Service. The biologist shall have the authority to halt the construction or sediment removal activities and shall devise methods to reduce the noise and/or disturbance in the vicinity. This may include methods such as, but not limited to, turning off vehicle engines and other equipment whenever possible to reduce noise, installing a protective noise barrier between the nest site and the construction activities, and working in other areas until the young have fledged. All active nests shall be monitored on a weekly basis until the nestlings fledge.	Biology
BIO-9	Conduct Pre-Construction Surveys for Swainson's Hawks. If ground disturbance occurs at the 47th Street East sediment disposal site during the breeding season PWD shall retain a qualified ornithologist and conduct pre-construction surveys within one-half mile of the sediment disposal site in regions with suitable nesting habitat for Swainson's hawks. The survey periods will follow a specified schedule: Period I occurs from 1 January to 20 March, Period II occurs from 20 March to 5 April, Period III occurs from 5 April to 20 April, Period IV occurs from 21 April to 10 June, and Period V occurs from June 10 to July 30. Surveys are not recommended during Period IV because identification is difficult, as the adults tend to remain within the nest for longer periods of time. No fewer than three surveys per period in at least two survey periods shall be completed immediately prior to the start of Project construction. If a nest site is found, consultation with CDFW shall be required to ensure Project construction will not result in nest disturbance. If present PWD shall implement a 0.25 mile non-disturbance buffer between 1 March and 15 September, or until the nest has been abandoned or the chicks have fledged. These buffer zones may be adjusted as appropriate in consultation with a qualified ornithologist and CDFW.	Biology
BIO-11	Conduct Focused Surveys for Ringtail and Avoid Denning Areas. If vegetation clearing will occur during the breeding season for ringtail cat (March 1 through June 30), a qualified biologist will conduct focused surveys for potential dens within all areas proposed for clearing and grading including a 200 foot buffer. Any active dens will be avoided, and a 200-foot disturbance-free buffer will be established. This buffer may be adjusted in coordination with the CDFW and the Forest Service, depending on the specific location and current activity occurring in the area. Once the young have left the den or the breeding attempt has failed, normal vegetation clearing and earth moving activities can resume. All activities that involve the ringtail shall be documented and reported to the CDFW and the Forest service within 30 days of the activity.	Biology
BIO-14	Conduct Surveys for Southwestern Pond Turtle and Implement Monitoring, Avoidance, and Minimization Measures. Prior to ground disturbance or vegetation clearing in the Reservoir or below the dam on PWD access road PWD shall retain a qualified biologist to conduct focused surveys for southwestern pond turtle in the Reservoir and Little Rock Creek. The resume of the proposed biologists will be provided to the Forest service for concurrence prior to conducting the surveys. This biologist will be referred to as the authorized biologist hereafter. Focused surveys shall consist of a minimum of four daytime surveys, to be completed between 1 April and 1 September. The survey schedule may be adjusted in	Biology

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ID	Standard Project Commitment	Issue Areas Affected
	consultation with the Forest Service, as appropriate, to reflect the existing weather or stream conditions. The qualified biologist shall conduct focused, systematic surveys for southwestern pond turtle nesting sites. The survey area shall include all suitable nesting habitat located within 200 feet of occupied habitat in which Project-related ground disturbance will occur. This area may be adjusted based on the existing topographical features on a case-by-case basis with the approval of the Forest Service. Surveys will entail searching for evidence of pond turtle nesting, including remnant eggshell fragments, which may be found on the ground following nest depredation. If a southwestern pond turtle nesting area would be adversely impacted by construction activities, PWD shall avoid the nesting area. If avoidance of the nesting area is determined to be infeasible, the authorized biologist shall coordinate with CDFW and Forest Service to identify if it is possible to relocate the pond turtles. Eggs or hatchlings shall not be moved without the written authorization from the CDFW and Forest Service. A qualified biologist with demonstrated expertise with southwestern pond turtles shall monitor construction activities where pond turtles are present. The authorized biologist will be present during all activities immediately adjacent to, or within, habitat that supports populations of southwestern pond turtles. If the installation of fencing is deemed necessary by the authorized biologist, one clearance survey for southwestern pond turtles shall be conducted by the fence installation. Clearance surveys for southwestern pond turtles shall be conducted by the authorized biologist prior to the initiation of vegetation clearing or construction each day until the top three feet of sediment has been removed from the reservoir. Conduct Surveys for Two-Striped Garter Snakes and Implement Monitoring, Avoidance, and Minimization Measures. Prior to ground disturbance or vegetation clearing in the Reservoir or below the dam o	
BIO-15	surveys shall consist of a minimum of four daytime surveys within one week of vegetation clearing. The survey schedule may be adjusted in consultation with the Forest service to reflect the existing weather or stream conditions. The authorized biologist will be present during all activities immediately adjacent to or within habitat that supports populations of the two-striped garter snake. Clearance surveys for garter snakes shall be conducted by the authorized biologist prior to the initiation of construction each day. Any snakes found within the area of disturbance or potentially affected by the Project will be relocated to the nearest suitable habitat that will not be affected by the Project. Conduct Surveys for Coast Range Newts and Implement Monitoring, Avoidance, and Minimization Measures. Prior to ground disturbance or vegetation clearing in the Reservoir (at Rocky Point only) or below the dam on PWD access road PWD shall retain a qualified biologist to conduct surveys for coast range newts where suitable habitat is present and directly impacted by construction vehicle access, or maintenance. The resume of the proposed	Biology
BIO-16	biologists will be provided to the Forest service for concurrence prior to conducting the surveys. This biologist will be referred to as the authorized biologist hereafter. Focused surveys shall consist of a minimum of four daytime surveys within one week of vegetation clearing. The survey schedule may be adjusted in consultation with the Forest service to reflect the existing weather or stream conditions. The authorized biologist will be present during all activities immediately adjacent to or within habitat that supports populations of the coast range newts. Clearance surveys for coast range newts shall be conducted by the authorized biologist prior to the initiation of construction each day in suitable habitat. Any coast range newts found within the area of disturbance or potentially affected by the Project will be relocated to the nearest suitable habitat that will not be affected by the Project.	Biology
BIO-17	Conduct Surveys for Terrestrial Herpetofauna and Implement Monitoring, Avoidance, and Minimization Measures. Prior to ground disturbance or vegetation clearing at all Project locations PWD shall retain a qualified biologist to conduct surveys for terrestrial herpetofauna where suitable habitat is present and directly impacted by construction vehicle access, or maintenance. The resume of the proposed biologists will be provided to the Forest service for	Biology

ID	Standard Project Commitment	Issue Areas Affected
	concurrence prior to conducting the surveys. This biologist will be referred to as the authorized biologist hereafter. Focused surveys shall consist of a minimum of three daytime surveys and one nighttime survey within one week of vegetation clearing. The survey schedule may be adjusted in consultation with the Forest service to reflect the existing weather or stream conditions. The authorized biologist will be present during all activities immediately adjacent to or within habitat that supports terrestrial herpetofauna. Clearance surveys for terrestrial herpetofauna shall be conducted by the authorized biologist prior to the initiation of construction each day in suitable habitat. Terrestrial herpetofauna found within the area of disturbance or potentially affected by the Project will be relocated to the nearest suitable habitat that will not be affected by the Project. Conduct Protocol Surveys for Burrowing Owls. Refer to the discussion following Table 1	
BIO-18	for the full text of this SPC.	Biology
BIO-20	Survey for Maternity Colonies or Hibernaculum for Roosting Bats. Prior to ground disturbance or vegetation clearing at all Project locations PWD shall retain a qualified biologist to conduct surveys for sensitive bats. Surveys shall be conducted no more than 15 days prior to grading near or the removal of trees or other structures. The resume of the proposed biologists will be provided to the Forest service for concurrence prior to conducting the surveys. Surveys shall also be conducted during the maternity season (1 March to 31 July) within 300 feet of project activities. If active maternity roosts or hibernacula are found, the structure, tree or feature occupied by the roost shall be avoided (i.e., not removed), if feasible. If avoidance of the maternity roost is not feasible the biologist will implement the following actions. Maternity Roosts. If a maternity roost will be impacted/removed by the Project, and no alternative maternity roost exists in proximity, substitute roosting habitat for the maternity colony shall be provided in an adjacent area free from project impacts. Alternative roost sites will be designed to meet the needs of the specific species and will be constructed/installed in coordination with CDFW and Forest service. By making the roosting habitat available prior to eviction, the colony will have a better chance of finding and using the roost. Alternative roost sites must be of comparable size and proximal in location to the impacted colony. The CDFW and Forest Service shall be notified of any hibernacula or active nurseries within the construction zone. Exclusion of bats prior to eviction from roosts. If non-breeding bat hibernacula are found in trees scheduled to be removed, the individuals shall be safely evicted, under the direction of a qualified biologist, by opening the roosting area to allow airflow through the cavity or other means determined appropriate by the bat biologist (e.g., installation of one-way doors). In situations requiring one-way doors, a minimum of one week shall	Biology
BIO-22	Conduct Surveys for American Badger and Desert Kit Fox and Avoid During the Breeding Season. Prior to ground disturbance or vegetation clearing at the 47th Street sediment disposal site and within 200 feet of the Reservoir PWD shall retain a qualified biologist to conduct surveys for American badger and desert kit fox. Surveys shall be conducted no more than 15 days prior to site mobilization, grading near or sediment. The resume of the proposed biologists will be provided to the Forest service for concurrence prior to conducting the surveys. If present, occupied American badger and desert kit fox dens shall be flagged and ground-disturbing activities avoided within 100 feet of the occupied den. Maternity dens shall be avoided during pup-rearing season (15 February through 1 July) and a minimum 200-foot buffer established. Buffers may be modified with the concurrence of the CDFW and Forest Service. Maternity dens shall be flagged for avoidance, identified on construction maps, and a biological monitor shall be present during construction activities.	Biology

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ID	Standard Project Commitment	Issue Areas Affected
	Inactive Dens. Inactive dens that would be directly impacted by the placement of fill shall be excavated either by hand or mechanized equipment under the direct supervision of the biologist and backfilled to prevent reuse by badgers or kit fox. Potentially and known active dens shall not be disturbed during the whelping/pupping season (February 1 – September 30). A den may be declared "inactive" after three days of monitoring via camera(s) or a tracking medium have shown no kit fox or American badger activity. Passive Relocation. If avoidance of a non-maternity den is not feasible, badgers shall be relocated by slowly excavating the burrow (either by hand or mechanized equipment under the direct supervision of the biologist, removing no more than 4 inches at a time) before or after the rearing season (15 February through 1 July). Relocation of badgers shall occur only after consultation with the CDFW and the Forest Service. Kit fox shall be passively hazed only outside the pupping season. A written report documenting any exclusion events shall be provided to the Forest service and CDFW within 30 days of relocation.	
CUL-1	Archaeological Monitoring Outside the Little Rock Creek and Reservoir Bed. Archaeological monitoring shall be conducted by a qualified archaeologist familiar with the types of prehistoric and historical resources that could be encountered within the Project area. A monitor(s) shall be present for all ground disturbing activities that involve excavation of previously undisturbed soil (pre-dam ground surface level) outside of the Little Rock Creek and Reservoir bed. A monitoring program shall be developed and implemented by PWD, in consultation with the Forest Service, to ensure the effectiveness of monitoring. Intermittent monitoring may occur in areas of moderate archaeological sensitivity at the discretion of the principal archaeologist. A Native American monitor may be required at culturally sensitive locations specified by the Forest Service following government-to-government consultation with Native American tribes. PWD shall retain and schedule any required Native American monitors.	Cultural Resources
CUL-2	Unidentified Cultural Resource Discovery Procedures. If previously unidentified cultural resources are unearthed during construction activities, construction work in the immediate area of the find shall be halted and directed away from the discovery until a qualified archaeologist assesses the significance of the resource. Once the find has been inspected and a preliminary assessment made, PWD would consult with the Forest Service to make the necessary plans for evaluation and treatment of the find(s). SPC CUL-1 shall also be implemented for CUL-2.	Cultural Resources
CUL-3	Unidentified Human Remains Discovery Procedures. PWD shall follow all State and federal laws, statutes, and regulations that govern the treatment of human remains. Avoidance and protection of inadvertent discoveries which contain human remains shall be the preferred protection strategy with complete avoidance of impacts to such resources protected from direct Project impacts by Project redesign. If human remains are discovered during construction, all work shall be diverted from the area of the discovery and the Forest Service authorized officer shall be informed immediately. If the remains are determined to be of Native American origin and are on federal land, then the remains shall be treated in accordance with the Native American Graves Protection and Repatriation Act (NAGPRA). If non-Native American human remains are discovered on federal land, then the County coroner would be contacted to determine the appropriate course of action. If the human remains are not on federal land, the remains shall be treated in accordance with Health and Safety Code Section 7050.5, CEQA Section 15064.5(e), and Public Resources Code Section 5097.98. PWD shall assist and support the Forest Service, as appropriate, in all required NAGPRA and Section 106 actions, government to-government and consultations with Native Americans, agencies and commissions, and consulting parties as requested by the Forest Service. PWD shall comply with and implement all required actions and studies that result from such consultations.	Cultural Resources
FIRE-1	Curtailment of Activities. All construction activities shall be curtailed in the event of a fire or when fuel and weather conditions get into the "very high" and "extreme" ranges, as determined by the USDA Forest Service through daily Project Activity Level (PAL) designations. The specific Project-related activities to be halted during very high or extreme weather conditions would be at the discretion of the USDA Forest Service.	Wildfire Prevention

Table 1.	Littlerock Sediment Removal Project SPCs	
ID	Standard Project Commitment	Issue Areas Affected
FIRE-2	Preparation of a Fire Plan. PWD, in coordination with their contractor, shall prepare a Fire Plan to be filed with the USDA Forest Service no less than one week prior to the start of construction that includes the following: (1) responsibilities of PWD and the Forest Service in regards to fire prevention and inspection of work areas; (2) personnel in charge of overseeing Fire Plan implementation; (3) staff and equipment that can be used for fighting fire; and (4) emergency measures for construction curtailment.	Wildfire Prevention
FIRE-3	Spark Arrester Requirements. The exhausts of all equipment powered by gasoline, diesel, or other hydrocarbon fuel shall be equipped with spark arresters that have been approved by the USDA Forest Service, as indicated in the most recent publication of the agency's "Spark Arrester Guide."	Wildfire Prevention
GHG-1	Recycle Construction Wastes . Construction wastes (asphalt, concrete, and other wastes as appropriate) and the removed sediment will used, re-used, or recycled to the extent feasible.	Greenhouse Gases
GEO-1	Geotechnical Investigation. Prior to construction, PWD (using a licensed geologist or engineer) shall perform a design-level geotechnical investigation, which shall include evaluation of soil and slope stability hazards as a result of seismic failure in areas of planned grading and excavation, and provide recommendations for development of grading and excavation plans. Based on the results of the geotechnical investigations, appropriate support and protection measures shall be designed and implemented to maintain the stability of soils and slopes adjacent to work areas during and after construction.	Geology and Soils
HYDRO-1	Fill From Reservoir Excavation Will Not Be Placed in Stream Channels. With the exception of temporary stockpiles at the reservoir during excavation, material excavated from the reservoir bed would not be placed within a watercourse, or in a manner that would divert or obstruct the flow path or floodplain of any watercourse.	Biology, Geology and Soils, Hydrology, Water Quality
LAND-1	Obtain Necessary Conditional Use Permits. PWD shall temporarily store or permanently dispose of the excavated sediment from Littlerock Reservoir only at a location that has a Conditional Use Permit (CUP) from the local jurisdiction (i.e., County of Los Angeles or City of Palmdale) for sediment storage or disposal. PWD shall consult with the local jurisdiction to ensure compliance with the requirements of the CUP.	Recreation and Land Use
LAND-2	Design Grading to Accommodate OHV Access. The sediment removal Excavation Plan shall ensure OHV ingress/egress is available to the Reservoir bottom from the existing boat ramp.	Recreation and Land Use
	Prepare a Construction Noise Complaint and Vibration Plan. Prior to construction, a Construction Noise Complaint and Vibration Plan shall be prepared by PWD. The Plan shall establish a telephone number for use by the public to report any nuisance noise conditions associated with Project activities occurring outside the ANF. PWD shall ensure that:	
	A noise and vibration liaison is assigned to respond to all public construction noise complaints, and	Noise Degraption
NOI-1	Either (a) the telephone number is staffed by the noise and vibration liaison during construction hours; or (b) the phone number is connected to an automatic answering feature, with date and time stamp recording, to answer calls when the phone is unattended.	Noise, Recreation and Land Use
	This telephone number shall be posted at entrances to the Reservoir and PWD sediment storage site on 47th Street in a manner visible to passersby. The Plan shall detail how PWD would respond to noise and vibration complaints and document the resolution of those complaints.	
NOI-2	PWD Site Buffer Requirements . Project activities within the PWD property located on 47 th Street East shall not occur within 500 feet of any residential structure.	Noise, Recreation and Land Use
TRA-1	 Prepare Traffic Control Plan. A Traffic Control Plan shall be prepared by PWD available for review, inspection, and input by Caltrans, Forest Service, Los Angeles County, and the City of Palmdale. The Plan shall include, but is not limited to: The location and need for flagmen and other temporary traffic control devices, including within the ANF, at the PWD sediment staging site, at the intersection of Cheseboro Road and Pearblossom Highway to ensure safe left turn movements onto Pearblossom Highway; 	Transportation, Hazards and Public Safety
	Travel time restrictions for trucks to avoid traveling along the Cheseboro Road - Pearblossom Highway – Avenue T haul route during the afternoon peak period; i.e., from	

Table 1. I	ittlerock Sediment Removal Project SPCs	
ID	Standard Project Commitment	Issue Areas Affected
	4:00 to 6:00 p.m., to the extent feasible, utilizing Cheseboro Road, Barrel Springs Road, 47th Street E, Pearblossom Highway, and Avenue T;	
	The need for a fair-share contribution to the funding of future improvements at the intersections of Cheseboro Road/Pearblossom Highway and Pearblossom Highway/Avenue T in the event afternoon peak period restrictions cannot be utilized.	
	The need for any oversize vehicle, weight restriction, or encroachment permits;	
	Assurance of emergency access to and through the Reservoir and PWD site work areas;	
	 Procedures for haul trucks to immediately pull into the shoulder when emergency vehicles with sirens on are travelling in their vicinity; 	
	Designated work area access locations;	
	Driveway turning restrictions; and	
	Designated parking/staging locations for workers and equipment.	
TRA-2	Pavement Rehabilitation – Public or National Forest Roadways. PWD and/or its contractor shall conduct a before-and-after evaluation of pavement conditions along the sediment haul routes to document any damage caused by the haul truck activities. The documentation shall include written descriptions and photographs of pre-Project and post-Project pavement conditions. Any pavement or other infrastructure damage caused by the haul trucks shall be repaired/rehabilitated to pre-Project conditions or better. This measure shall be subject to review, approval, and inspection by the Los Angeles County Department of Public Works, the City of Palmdale Department of Public Works, USFS, and Caltrans, depending on who has jurisdiction over the route.	Transportation
WQ-1	Prepare Spill Response Plan. A Spill Response Plan would be prepared prior to the start of construction activities. This plan would describe the required materials and methodology to quickly and effectively contain and remove any spill or accidental release of hazardous materials. Required materials may include protective clothing, absorbent materials, hand tools for minor excavation and soil removal, and appropriate containers for hazardous materials and contaminated soil. The Spill Response Plan would include worker training on proper containment and disposal of hazardous materials. The requirements of the Spill Response Plan would be repeated and described in the SWPPP.	Biology, Water Quality, Hazards and Public Safety
	Prepare a Storm Water Pollution Prevention Plan (SWPPP). A SWPPP shall be developed for the Project in compliance with the federal Clean Water Act, and Notices of Intent shall be filed with the State Water Resources Control Board and the applicable Regional Water Quality Control Board (Lahontan). The SWPPP shall be stored at Project work sites for reference by Project personnel and for inspection review by the Environmental Monitor. The SWPPP shall include Best Management Practices (BMPs) that would be adhered to during Project activities in order to stabilize disturbed areas and reduce the potential for erosion and sedimentation, among other effects. BMPs may include but are not limited to those described below.	
	 Erosion minimizing efforts such as straw wattles, water bars, covers, silt fences, and sensitive area access restrictions (for example, flagging) shall be installed before and during clearing and grading activities. 	Water Quality,
WQ-2	 Mulching, seeding, or other suitable stabilization measures shall be used to protect exposed areas during ground-disturbing activities. 	Hazards and Public Safety
	Measures such as use of regular inspections and oil pans or other comparable devices shall be used to ensure that contaminants are not discharged from the construction sites.	
	• Silting/sedimentation basin(s) shall be established in appropriate locations to capture eroded soils and other materials, and would be regularly cleared to maintain capacity.	
	• Straw wattles or other comparably effective devices (as determined by the Civil Engineer, in consultation with the Environmental Monitor) shall be placed on the downslope sides of work areas to direct runoff from the work areas into temporary sedimentation basins.	
	All erosion control materials shall be biodegradable and natural fiber. All BMPs required by the SWPPP shall be checked and maintained regularly and after all large storm events. Proper implementation will be verified regularly by the onsite Environmental Monitor.	

The full text for SPC BIO-1a (Provide Restoration/Compensation for Impacts to Native Vegetation Communities) and SPC BIO-18 (Conduct Protocol Surveys for Burrowing Owls) is provided below. Please refer to Table 1 for the full text of all other SPCs that are applicable to the proposed action.

BIO-1a Provide Restoration/Compensation for Impacts to Native Vegetation Communities. The PWD shall restore all areas outside the permanent sediment removal area. Prior to disturbance, PWD shall have a qualified biologist document the community type and acreage of vegetation that would be subject to project disturbance. Impacts to all native trees and oaks with would be documented by identifying the species, number, location, and DBH.

The PWD shall prepare a Habitat Restoration and Revegetation Plan for the Project, which includes plans for restoration, enhancement/re-vegetation and/or the acquisition of off-site habitat. The plan shall include at minimum: (a) maps depicting the location of the mitigation site(s) (off site mitigation may be required); (b) locations and details for top soil storage (c) the plant species to be used; (d) seed and cutting collecting guidelines; (e) time of year that the planting would occur and the methodology of the planting; (f) a description of the irrigation methodology for container plants; (g) measures to control exotic vegetation on site; (h)performance standards; (i) a detailed monitoring program; j) locations and impacts to all native trees, k) and locations of temporary or permanent gates, barricades, or other means to control unauthorized vehicle access on access to restoration areas.

The PWD would use locally collected seed mix, locally collected cuttings, etc. to revegetate areas disturbed by construction activities. All habitats dominated by non-native species prior to Project disturbance shall be revegetated using appropriate native species. Forest Service approval is required for seeding on NFS land. No commercially purchased seeds, stock, etc. would be accepted without the approval of the Forest Service on NFS lands and must be certified to be free of noxious weeds. The Habitat Restoration and Revegetation Plan shall include a monitoring element. Post seeding and planting, monitoring would be yearly from years one to five and every other year from years six to ten, or until the success criteria are met. If the survival and cover requirements have not been met, PWD is responsible for replacement planting to achieve these requirements. Replacement plants shall be monitored with the same survival and growth requirements as previously mentioned.

The replacement ratios for permanent impacts to riparian vegetation are 3:1 and 1.5:1 for juniper woodland. Individual native trees which are to be removed shall be replaced as follows: trees from 1 to 5 inches DBH shall be replaced at 3:1; trees from 5 to 12 inches shall be replaced at 5:1; trees from 12 to 24 inches shall be replaced at 10:1; and trees from 24 to 36 inches shall be replaced at 15:1. All planting locations, procedures, and results shall be evaluated by a qualified biologist and Forest Service botanist (as applicable).

The creation or restoration of habitat shall be monitored annually for years one to five on both Forest Service lands and private lands and bi-annually for years six to

ten on Forest Service lands, or until the performance standards are met, after mitigation site construction to assess progress and identify potential problems with the restoration site. Remediation activities (e.g. additional planting, removal of nonnative invasive species, or erosion control) shall be taken during the 10-year period if necessary to ensure the success of the restoration effort. If the mitigation fails to meet the established performance standards after the 10-year maintenance and monitoring period, monitoring and remedial activities shall extend beyond the 10-year period until the standards are met or unless otherwise specified by the Forest Service on NFS lands. If a fire occurs in a revegetation area within the 10-year monitoring period, PWD shall be responsible for a one-time replacement.

Compensation Land Selection Criteria. Criteria for the acquisition, initial protection and habitat improvement, and long-term maintenance and management of compensation lands would include all of the following:

- A. Compensation lands will provide habitat value that is equal to or better than the quality and function of the habitat impacted by the Project, taking into consideration soils, vegetation type, topography, human-related disturbance, wildlife movement opportunity, proximity to other protected lands, management feasibility, and other habitat values, subject to review and approval by PWD and Forest Service;
- B. To the extent that proposed compensation habitat may have been degraded by previous uses or activities, the site quality and nature of degradation must support the expectation that it will regenerate naturally when disturbances are removed;
- C. Be near larger blocks of lands that are either already protected or planned for protection, or which could feasibly be protected long-term by a public resource agency or a non-governmental organization dedicated to habitat preservation;
- Not have a history of intensive recreational use or other disturbance that might cause future erosion or other habitat damage, and make habitat recovery and restoration infeasible;
- E. Not be characterized by high densities of invasive species, either on or immediately adjacent to the parcels under consideration, that might jeopardize habitat recovery and restoration;
- F. Not contain hazardous wastes that cannot be removed to the extent that the site could not provide suitable habitat;
- G. Must provide wildlife movement value equal to that on the project site, based on topography, presence and nature of movement barriers or crossing points, location in relationship to other habitat areas, management feasibility, and other habitat values; and
- H. Have water and mineral rights included as part of the acquisition, unless PWD and Forest Service, in consultation with CDFW and USFWS, agree in writing to the acceptability of land without these rights.

Conduct Protocol Surveys for Burrowing Owls. Concurrent with desert tortoise clearance surveys at the 47th Street East sediment disposal site PWD shall retain a qualified biologist to conduct pre-construction surveys for burrowing owls in accordance with CDFW guidelines (CDFG 2012). Pre-construction surveys for burrowing owls shall occur no more than 15 days prior to initiation of ground disturbance or site mobilization activities. The survey area shall include the 47th Street East sediment disposal site and surrounding 500 foot survey buffer where access is legally available. If an active burrowing owl burrow is detected within 500 feet from the Project Disturbance Area the following avoidance and minimization measures shall be implemented.

Establish Non-Disturbance Buffer. Occupied burrows shall not be disturbed during the nesting season (1 February through 31 August). Owls present on site after 1 February will be assumed to be nesting unless evidence indicates otherwise. The protected buffer will remain in effect until 31 August, or based upon monitoring evidence, until the young owls are foraging independently or the nest is no longer active. The non-disturbance buffer and fence line may be reduced by a qualified biologist if project-related activities that might disturb burrowing owls would be conducted during the non-breeding season (September 1st through January 31st). Signs shall be posted in English and Spanish at the fence line indicating no entry or disturbance is permitted within the fenced buffer.

Passive Relocation. During the non-breeding season, the birds may be passively relocated. Relocation of owls during the non-breeding season will be performed by a qualified biologist using one-way doors, which should be installed in all burrows within the impact area and left in place for at least four nights. These one-way doors will be removed and the burrows hand excavated prior to the initiation of grading. To avoid the potential for owls evicted from a burrow to occupy other burrows within the impact area, one-way doors will be placed in all potentially suitable burrows within the impact area when eviction occurs. Any damaged or collapsed burrows will be replaced with artificial burrows in adjacent habitat at a 2:1 ratio.

Monitoring: If construction activities would occur within 500 feet of the occupied burrow during the nesting season (February 1 – August 31st) the Designated Biologist or Biological Monitor shall monitor to determine if these activities have potential to adversely affect nesting efforts, and shall implement measures to minimize or avoid such disturbance.

Compensation for the Loss of foraging habitat. If present PWD would offset the loss of up to six acres of foraging habitat by the acquisition and preservation of undisturbed areas of the project site mitigation lands outside of the Project site or a combination of both.

Compensation Land Selection Criteria. Criteria for the acquisition, initial protection and habitat improvement, and long-term maintenance and management of compensation lands will include all of the following:

A. Compensation lands will provide habitat value that is equal to or better than the quality and function of the habitat impacted by the Project, taking into consideration soils, vegetation, topography, human-related disturbance,

- wildlife movement opportunity, proximity to other protected lands, management feasibility, and other habitat values, subject to review and approval by PWD and Forest Service (as applicable);
- B. To the extent that proposed compensation habitat may have been degraded by previous uses or activities, the site quality and nature of degradation must support the expectation that it will regenerate naturally when disturbances are removed;
- C. Be near larger blocks of lands that are either already protected or planned for protection, or which could feasibly be protected long-term by a public resource agency or a non-governmental organization dedicated to habitat preservation;
- D. Not have a history of intensive recreational use or other disturbance that might cause future erosion or other habitat damage, and make habitat recovery and restoration infeasible;
- E. Not be characterized by high densities of invasive species, either on or immediately adjacent to the parcels under consideration, that might jeopardize habitat recovery and restoration;
- F. Not contain hazardous wastes that cannot be removed to the extent that the site could not provide suitable habitat;
- G. Must provide wildlife movement value equal to that on the project site, based on topography, presence and nature of movement barriers or crossing points, location in relationship to other habitat areas, management feasibility, and other habitat values; and
- H. Have water and mineral rights included as part of the acquisition, unless PWD and Forest Service, in consultation with CDFW and USFWS, agree in writing to the acceptability of land without these rights.